DOC # 03913

Section 7 Routine Formal Consultation Clearance Sheet

Project Tracking #:151422-SWR-2005-SA 00761

Project Name: Lassen Natl Forest - BA

Action Agency: USDA-Lassen Natl Forest

Lead Biologist: Brown

Initiation Date: 10/21/05 **Response Due Date:** 11/21/05

Clearances

Field Office Section 7 Coordinator Elizabeth A. Campbell

Return for Revisions Date: Feb 3, 2006 **Sign-Off Date:** Feb 6, 2006

X I have reviewed this document and find that it is consistent with applicable requirements of statute, regulation, policy, and guidance.

Office Supervisor

Return for Revisions Date: _____ **Sign-Off Date:** 2-6-06

✓ I have reviewed the attached document and find that we have complied with the requirements of required QA/QC procedures and the document is ready for review by General Counsel (if required) and signature.

_____ Meets GC general waiver of certain consultation documents **(No further clearance from GC required)**

Regional General Counsel (signature req'd for individual waivers)

Staff Attorney (sign)_____

Return for Revisions Date:_____ **Sign-Off Date:** 2/10/2006

_____ This document meets the 5 criteria set out in the final delegation of section 7 authority memo and GCSW **hereby waives legal review**

✓ GCSW has reviewed this document and found it to be **legally sufficient** as defined in the final delegation of section 7 authority memo. ✓ once revisions are made. → minor revisions scribbled on attached

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FAX SIGNED COPY TO:
Comments:

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802- 4213

In response refer to:
151422SWR2005SA00761:HLB

FEB 2 1 2006

Laurie Tippin
Forest Supervisor
U.S. Department of Agriculture
Lassen National Forest
2550 Riverside Drive
Susanville, California 96130

Dear Ms. Tippin:

This letter amends the programmatic biological opinion for the Lassen National Forest's (LNF) Non-routine Maintenance and Construction Activities on Existing Roads, which was issued as a conference and biological opinion on May 5, 1999, and adopted as the final biological opinion on August 17, 2000. This letter also amends the December 22, 2000 Pacific salmon Essential Fish Habitat (EFH) consultation for the LNF Land and Resource Management Plan (LRMP), as amended by the Interim Strategy for Managing Anadromous Fish-Producing Watersheds in Eastern Oregon and Washington, Idaho, and portions of California, and the Sierra Nevada Forest Plan Amendment, which includes the LNF's Long-term Strategy for Anadromous Fish-producing Watersheds. This letter is in response to your October 17, 2005, request for NMFS' concurrence that the LNF's proposed changes to the project description for non-routine road maintenance and construction activities will not result in any additional adverse effects to Federally listed threatened Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), threatened Central Valley steelhead (*O. mykiss*), their designated critical habitat, or EFH than were previously considered in the consultation for the LNF's Non-routine Maintenance and Construction Activities on Existing Roads, or the LRMP EFH consultation.

NMFS' programmatic biological opinion for the LNF's Non-routine Maintenance and Construction Activities on Existing Roads program addressed the program's potential impacts to Federally listed threatened Central Valley spring-run Chinook, threatened Central Valley steelhead, and their designated critical habitat.

The LNF proposes to update the project description for the Non-routine Road Maintenance and Construction Activities on Existing Roads program to streamline section 7 consultation procedures, and use new and updated criteria for implementing road maintenance and construction activities. The purpose of the update is to support LNF efforts to attain watershed improvement goals for roads and habitat connectivity contained in the Long-term Strategy for Anadromous Fish-producing Watersheds. Road maintenance and improvement practices, and the methods used to document and evaluate the effects of these activities, have evolved substantially since consultation was first initiated in 1998. Best Management Practices (BMPs)

have been updated and improved methods are now being applied to all activities. The request to update the project description seeks to formally recognize these improved practices so that they can be consistently applied to future projects. Specifically, changes to the project description will include the following actions:

(1) Update the section 7 streamlining process for Non-routine Road Maintenance and Construction Activities on Existing Roads. In lieu of the LNF/NMFS Level-1 team, LNF district journey-level fisheries biologists would informally consult with NMFS on projects documented on tier forms. This would occur when agreed to by the Level-1 team and when activities are within the scope of this consultation.

(2) Update the project effects analyses to incorporate the anticipated effects resulting from the implementation of grouped activities on a sub-watershed basis. This replaces the existing approach where individual assessments are conducted for each project.

(3) Add new criteria for implementing five non-routine in-channel road/watershed improvement activities. The criteria will (1) limit construction to summer months, with up to 25 culvert removal and replacement projects per year, and no more than five projects constructed per year in perennial channels in any of the LNF's five anadromous watersheds (*i.e.*, Mill, Deer, Antelope, Battle, and Butte Creeks); (2) define activity categories that include culvert/road-fill removal and channel restoration, culvert replacement with a low-water crossing or open-bottomed arch, culvert replacement with a bridge, and improvement of culvert outlets; (3) direct project designs to follow stream simulation parameters that are intended to mimic natural stream processes at road/stream crossings; (4) use an interdisciplinary team to develop projects based on watershed prioritization, project prioritization, and implementation prioritization; (5) use standard project design and control measures for types of equipment to be used, site preparation, and construction; and (6) describe annual monitoring and reporting requirements.

(4) Update the implementation criteria for the following non-routine road maintenance and construction practices:

(a) Drainage structure maintenance - Work consists of cleaning and reconditioning culverts and other drainage structures to minimize risk of failure. Work to maintain the function of drainage structures is expanded to include the addition of improvements that enhance the performance of existing drainage structures.

(b) Rolling dip construction - Work consists of constructing a road drainage feature to prevent ditch and road surface erosion, and improve natural drainage connectivity. Rolling dip construction will occur on insloped roads where outsloping is not practical.

(c) Diversion prevent dip construction - Work consists of constructing a road feature that is strategically placed immediately below a channel crossing to minimize road capture of the natural drainage during an event that exceeds that channels

conveyance capacity. Diversion prevention dips will be constructed immediately below or downgrade of the stream crossing in order to minimize the effects and erosion from an overtopping event.

(d) Low-water crossing installation - Work consists of constructing a low-water crossing, or a low-water vented ford to pass water across or beneath the road surface. Low-water crossings pass water across the road surface and vented fords pass low flows beneath the road surface and high flows across the road surface. The crossings mimic natural drainage gradients and reduce the potential for stream crossing failures.

(e) Road outsloping - Work consists of configuring the road surface prism to disperse surface water and reduces erosion associated with inboard ditches and cross drains. Roads will be sloped at 2 to 4 percent, depending on safety requirements. On roadways with moderate to high traffic, outsloping may be accompanied by resurfacing.

Endangered Species Act (ESA) Section 7 Consultation

The programmatic biological opinion found that some non-routine road maintenance and construction activities were not likely to adversely affect Federally listed Central Valley spring-run Chinook salmon, and Central Valley steelhead, and their critical habitat, whereas others would be likely to cause adverse effects through short-term, indirect impacts from sedimentation, and alteration of habitat elements at downstream locations. Although some short-term adverse impacts may be expected, the program is largely beneficial to Federally listed salmonid and their critical habitat because it reduces chronic erosion throughout the action area. The biological opinion determined that the anticipated level of adverse effects were not likely to jeopardize the continued existence of Central Valley spring-run Chinook salmon or Central Valley steelhead, and were not likely to destroy or adversely modify their designated critical habitat. The incidental take statement for the biological opinion included reasonable and prudent measures and terms and conditions to avoid and minimize adverse effects to Federally listed salmonids and their critical habitat related to sediment production and habitat alteration.

The biological opinion anticipated that future non-routine maintenance and construction actions would undergo separate section 7 consultations for individual or grouped actions that would tier to the programmatic consultation. Individual projects would be proposed through project tiering forms that are developed and reviewed by a Level-1 team consisting of representatives from NMFS and the LNF. The Level-1 team develops project tiering forms, and determines the potential for non-routine road maintenance and construction actions to adversely affect listed species and their critical habitat. For future projects where the Level-1 team determines, with NMFS concurrence, that no further measures are required beyond those described in the programmatic biological opinion, a separate biological opinion will not be required. NMFS will prepare tiering letters to conclude formal consultation by tiering section 7 compliance for these actions to the biological opinion. For future road maintenance and construction actions where formal consultation cannot be concluded as described above (*i.e.*, where the Level-1 team or

NMFS concludes that additional measures are needed to avoid or minimize adverse effects to listed species), a separate formal consultation will be required and NMFS will issue a separate biological opinion.

Since the biological opinion became final on August 17, 2000, the status of Central Valley spring-run Chinook salmon and Central Valley steelhead has been updated, but essentially remains the same as previous designations. On June 28, 2005, NMFS issued its final decision to retain the status of Central Valley spring-run Chinook salmon as threatened (70 FR 37160). Critical habitat for Central Valley spring-run Chinook salmon and Central Valley steelhead was designated on September 2, 2005 (70 FR 52488). Critical habitat includes stream channels within certain occupied stream reaches and includes a lateral extent as defined by the ordinary high water mark (33 CFR 329.11) or the bankfull elevation. On January 5, 2006, NMFS issued a final decision that considered the Central Valley steelhead to be a Distinct Population Segment (DPS) rather than an Evolutionarily Significant Unit (ESU) and retained the status of Central Valley steelhead as threatened (71 FR 834).

The Central Valley spring-run Chinook salmon ESU has displayed broad fluctuations in adult abundance, ranging from 1,403 in 1993 to 25,890 in 1982 (Figure 1). The average abundance for the ESU was 12,590 for the period of 1969 to 1979, 13,334 for the period of 1980 to 1990, 6,554 from 1991 to 2001, and 16,349 since 2002. Sacramento River tributary populations in Mill, Deer, and Butte Creeks are probably the best trend indicators for the Central Valley spring-run Chinook ESU as a whole because these streams contain the primary independent populations with the ESU. Generally, these streams have shown a positive escapement trend since 1991 (Figure 1). Escapement numbers are dominated by Butte Creek returns, which have averaged over 7,000 fish since 1995. During this same period, adult returns on Mill Creek have averaged 778 fish, and 1,463 fish on Deer Creek. Although recent trends are positive, annual abundance estimates display a high level of fluctuation, and the overall number of Central Valley spring-run Chinook salmon remains well below estimates of historic abundance. Additionally, in 2003, high water temperatures, high fish densities, and an outbreak of Columnaris Disease (*Flexibacter Columnaris*) and Ichthyophthiriasis (*Ichthyophthirius multifiis*) contributed to the pre-spawning mortality of an estimated 11,231 adult spring-run Chinook salmon in Butte Creek. Because the Central Valley spring-run Chinook salmon ESU is confined to relatively few remaining streams, continues to display broad fluctuations in abundance, and a large proportion of the population (*i.e.*, in Butte Creek) faces the risk of high mortality rates, the population is at a moderate to high risk of extinction.

Existing wild anadromous steelhead stocks in the Central Valley mostly are confined to the upper Sacramento River and its tributaries, including Antelope, Deer, and Mill Creeks, and the Yuba River. Populations may exist in Big Chico and Butte Creeks and a few wild steelhead are produced in the American and Feather Rivers (McEwan and Jackson 1996). According to the findings of the Interagency Ecological Program Steelhead Project Work Team (1999), naturally spawning populations may exist in many other streams but are undetected due to lack of monitoring programs. Reliable estimates of Central Valley steelhead abundance for different basins are not available (McEwan 2001); however, McEwan and Jackson (1996) estimated the total annual run size for the entire Sacramento-San Joaquin system, based on ladder counts at

Red Bluff Diversion Dam (RBDD), to be no more than 10,000 adults. Steelhead counts at the RBDD have declined from an average of 11,187 for the period of 1967 to 1977, to an average of approximately 2,000 through the 1990s (McEwan and Jackson 1996, McEwan 2001). In the draft *Updated Status Review of West Coast Salmon and Steelhead* (NMFS 2003), the biological review team estimated that only about 3,628 female steelhead spawn naturally in the entire Central Valley. The future of the Central Valley steelhead DPS is uncertain because of the lack of status and trend data.

The LNF's proposal to update the section 7 streamlining process is a procedural change that will encourage direct coordination between NMFS and LNF district biologists and is expected to facilitate the consultation process for projects that are beneficial to anadromous fish and their critical habitat. The approach is consistent with the streamlining agreement established in the biological opinion because the Level-1 team will maintain an oversight role, while the biologist most familiar with the project description will be involved in the project evaluation process. Adverse impacts to anadromous fish and their designated critical habitat are not expected to occur as a result of this change. NMFS does not expect this change to result in any negative impact to the likelihood of survival and recovery of Central Valley spring-run Chinook salmon and Central Valley steelhead.

The LNF's proposal to modify the project effects analyses to incorporate the anticipated effects resulting from the implementation of grouped activities on a sub-watershed basis replaces the existing approach where individual assessments are conducted for each project. This approach is consistent with conventional methods of tracking watershed disturbance that are used by the LNF to support project effects determinations, and is consistent with the approach used by the Level-1 team for tracking baseline habitat indicators. A large majority of non-routine road maintenance and construction actions are small projects that occur in non-anadromous sub-watersheds that are tributary to anadromous habitat, and therefore do not result in individual impacts to Federally listed anadromous fish critical habitat located downstream. Instead, fish and their habitat are most likely to be affected by the aggregate effect of a group of actions that are implemented within the same sub-watershed. NMFS believes that this approach will result in more accurate effects determinations for future projects and will not result in any negative impact to the likelihood of survival and recovery of Central Valley spring-run Chinook salmon and Central Valley steelhead.

The LNF's proposal to add new criteria for implementing five non-routine in-channel road/watershed improvement activities, and update the implementation criteria for five other non-routine road maintenance and construction activities will result in effects to anadromous fish and their critical habitat that are similar in nature, duration, and extent, to the effects of activities that were previously considered in the biological opinion. Additional adverse effects to anadromous fish and their habitat are not expected. As described in the biological opinion, non-routine road maintenance and construction projects on existing roads have the potential to deliver sediment to streams and affect anadromous fish and their habitat through short-term increases and long-term decreases in sediment production. The short-term increases have potential to cause short-term adverse impacts to aquatic habitat that may result in decreased survival of the juvenile freshwater life stages of anadromous fish (*i.e.*, eggs, fry, and yearlings).

Implementation of these actions is expected to result in substantial long-term benefits to anadromous fish and their habitat by correcting existing erosion problems and reducing chronic long-term sediment delivery. Implementation of BMPs and LRMP standards and guidelines that cover road-related projects will reduce short-term impacts by minimizing the introduction of fine sediment into stream channels during project implementation and minimize the potential for adversely affecting anadromous fish and their habitat. Projects will be constructed during summer months when sediment transport is negligible. The number of instream projects that are constructed each year will be minimized to five per watershed to minimize the amount of sediment that is delivered to downstream anadromous habitat. NMFS believes that new and updated criteria will bring consistency to project prioritization, implementation, and monitoring, in a way that benefits anadromous fish. Therefore, NMFS does not expect there to be any negative impact to the likelihood of survival and recovery of Central Valley spring-run Chinook salmon and Central Valley steelhead.

After reviewing the May 5, 1999, programmatic conference and biological opinion for the LNF's Non-routine Maintenance and Construction Activities on Existing Roads, which was adopted as the final biological opinion on August 17, 2000; your October 17, 2005, letter amending the project description; and the best scientific and commercial data available regarding the status of threatened Central Valley spring-run Chinook salmon, threatened Central Valley steelhead, and their designated critical habitat, NMFS finds that the proposed changes to the LNF's Non-routine Maintenance and Construction Activities on Existing Roads program do not change the conclusion of the May 5, 1999, programmatic conference and biological opinion, which was adopted as the final biological opinion on August 17, 2000. The program is not likely to jeopardize the continued existence of the above listed species, and is not likely to destroy or adversely modify the conservation value of their designated critical habitat.

NMFS has determined that it is not necessary to re-issue the Incidental Take Statement of the biological opinion because the potential adverse effects related to the proposed changes to the project description will not change the amount or extent of take associated with the implementation of non-routine maintenance and construction activities, and because further measures are not necessary to minimize or avoid adverse effects to Central Valley spring-run Chinook salmon and Central Valley steelhead.

This concludes consultation for the proposed action. Reinitiation of consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered; (2) the action is subsequently modified in a manner that causes adverse effects to listed species or critical habitat; or (3) a new species is listed or critical habitat designated that may be affected by this action.

Essential Fish Habitat Consultation

The proposed project is within the region identified as EFH for Pacific salmon in Amendment 14 of the Pacific Salmon Fishery Management Plan, pursuant to the Magnuson-Stevens Conservation and Management Act (MSA). NMFS addressed the effects of LNF actions on the

EFH for Pacific salmon in a programmatic assessment of the LRMP on December 22, 2000. The EFH consultation considered, among other things, the impacts of ground disturbing activities such as culvert removal and road decommissioning. We find no additional effects of the proposed action to EFH that were not considered above or in the previous LRMP EFH consultation; therefore, additional EFH Conservation Recommendations will not be provided. Written response as required under section 305(b)(4)(B) of the MSA and Federal regulations (50 CFR § 600.920) will not be required. Should additional information reveal that the project may affect EFH and/or impact salmonids in a way not previously considered, or should the action be modified in a way that may cause additional effects to EFH, this determination may be reconsidered.

Please contact Howard Brown at (916) 930-3608, or via e-mail at howard.brown@noaa.gov if you have any questions concerning this project, or require additional information.

Sincerely,

for Rodney R. McInnis
Regional Administrator

References:

Interagency Ecological Program Steelhead Project Work Team. 1999. Monitoring, Assessment, and Research on Central Valley Steelhead: Status of Knowledge, Review Existing Programs, and Assessment Needs. in: Comprehensive Monitoring, Assessment, and Research Program Plan, Technical Appendix VII-11.

McEwan, D.R., and T. Jackson. 1996. Steelhead Restoration and Management Plan for California. California Department of Fish and Game, February 1996.

McEwan, D.R. 2001. Central Valley Steelhead. Contributions to the biology of Central Valley salmonids. R. Brown editor. California Department of Fish and Game Fish Bulletin No. 179.

National Marine Fisheries Service. 2003. Updated status of listed ESUs of West Coast salmon and steelhead. West Coast Salmon Biological Review Team. U.S. Department of Commerce, NOAA Tech Memo NMFS-NWFSC. June 2003.

Figure 1.- Adult spring-run Chinook salmon indexes for Mill, Deer, and Butte Creeks since 1991.

Year	Central Valley Total	Mill	Deer	Butte
1991	5,926	319	479	-
1992	3,044	237	209	730
1993	6,075	61	259	650
1994	6,187	723	485	474
1995	15,238	320	1,295	7,500
1996	9,082	253	614	1,413
1997	8,448	200	466	635
1998	31,471	424	1,879	20,259
1999	10,603	560	1,591	3,679
2000	9,429	544	637	4,118
2001	15,794	1,104	1,622	9,605
2002	17,407	1,594	2,185	8785
2003	17,564	1,426	2,759	4398
2004	14,074	988	804	7,394
2005	not available	1,150	2,239	10,625